



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,653	08/19/2003	Takuya Otsuka	Q76921	3747

23373 7590 04/30/2004

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

FISHMAN, MARINA

ART UNIT	PAPER NUMBER
----------	--------------

2832

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

my

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/642,653	OTSUKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Marina Fishman	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/18/2003</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***General Status***

1. This is a First Action on the Merits. Claims 1 - 10 are pending in the case and are being examined.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "2" and "3".
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "12" has been used to designate both "an insulation support" (page 1, line 28) and "a contact" (page 6, line 11); reference character "11" has been used to designate both "a first operating mechanism" (page 1, line 24) and "a contact" (page 5, line 24).
5. The Examiner has pointed out only few of the deficiencies, the Applicant is required to review all the Drawings and make necessary corrections.
6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

7. Claims 1 and 2 are objected to because of the following informalities: Claim 1, lines 15 and 16 recite "third electrode **disposed to said tank**" should be rephrased; Claim 2 line 3 "substantially at right angles" should be corrected as -- substantially right angles--.

Appropriate corrections are required.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art [instant Figures 7 and 8] in view of Furuta et al. [US 6,538,224].

Applicant Admitted Prior Art [instant Figures 7 and 8] discloses a gas-insulated switchgear having:

- a tank [1] filled with an electrically insulating gas;
- first and second conductors [2(2a), 3(2b)] disposed within said tank;

- a disconnecter [4] for disconnecting the first conductor and the second conductor from each other; and
- a grounding switch [5] for grounding the first conductor when the disconnecter is in an open position;
- the disconnecter includes: a first and second fixed electrode [7, 9] disposed on the first and second conductors, respectively, a bridging movable electrode [10] that is always maintained in contact with said first electrode and that is slidably movable for contacting with and separating from the second fixed electrode to connect and disconnect the first and second fixed electrodes, and an operating mechanism [11] for opening and closing operation of the movable electrode;
- grounding switch [5] includes the bridging movable electrode [10] which is in contact with the first contact, and a third fixed grounding electrode [13] **disposed to said tank** capable of contacting with the movable electrode when the movable electrode is separated from the second electrode; and wherein
- the operating mechanism is provided with an electrically insulating operating rod extending through the first fixed electrode;

- a third fixed electrode [13].

Regarding Claims 1, 2, 7 and 8 Applicant Admitted Prior Art [instant Figures 7 and 8] discloses the instant claimed invention except for the electrically insulating operating rod extending through the first fixed electrode in the direction of movement of the moveable electrode. Furuta et al. disclose a gas insulation switch apparatus having an operating rod [25] extending in the direction of movement of the moveable electrode [Figures 12, 13]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the operating rod in the direction of movement of the moveable electrode in Applicant Admitted Prior Art [instant Figures 7 and 8], as suggested by Furuta et al., in order to disconnect the switch.

Regarding Claims 3, 4, 9 and 10 Applicant Admitted Prior Art [instant Figures 7 and 8] discloses the disconnecter and the grounding switch are provided with insulation supports supporting the first, second fixed electrodes and the movable electrode, and are supported only by a flange closing the open end of the tank. The disconnecter and the grounding switch are accommodated within the tank.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Piazza et al. [US 6,683,267], Calvino [US 4,423,191]; Kamata et al. [US 4,468,716] all disclose gas-insulated switchgears. Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references may be relied upon in a

Art Unit: 2832

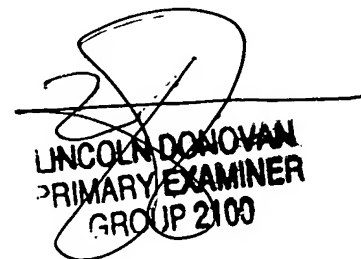
subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marina Fishman  
April 20, 2004

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
GROUP 2100